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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,871	09/30/2003	Francis Busch JR.		6788

7590 02/25/2008  
THEODORE C. JAY  
APARTMENT 600  
16 NORTH CHATSWORTH AVE.  
LARCHMONT, NY 10538

EXAMINER
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CHANNAVAJJALA, LAKSHMI SARADA

ART UNIT	PAPER NUMBER
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1611

MAIL DATE	DELIVERY MODE
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02/25/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/675,871	<b>Applicant(s)</b> BUSCH, FRANCIS	
	<b>Examiner</b> Lakshmi S. Channavajjala	<b>Art Unit</b> 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Receipt of RCE, amendment and remarks dated 11-9-07 is acknowledged.

#### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11-9-07 has been entered.

**Claims 1-5 have been canceled. New claims 6-8 have been added. Newly added claims are also directed to the same method as presented before and additionally include the limitation “ and simultaneously increasing the thickness of the diameter of the hair so treated by supplying oxygen directly to the scalp and hair”. However, the actual steps of wetting the hair/scalp, applying a shampoo having a pH of 8.0-11.0 and applying a conditioning cream containing hydrogen peroxide wherein the pH of the scalp remains between 8.0 and 11.0”.**

The following rejection of record has been maintained:

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,726,729 ('729) to Patel in view of US 5,474,578 to Chan et al ('578) or Chan in view of Patel or unpatentable over US 5,474,578 ('578) to Chan et al in view of US 6,010,990 to Rousso et al ('990) or '729 to Patel in view of '990 to Rousso.

Instant claims are directed to a method of increasing the health and appearance of the hair and scalp by supplying oxygen directly to the scalp and hair, comprising wetting the hair, applying to the scalp and hair a shampoo having a pH of 8 to 11 and followed by applying to the scalp a conditioning cream containing 1% to 4% hydrogen peroxide, wherein the pH of the scalp and hair remains at pH of 8 to 10.

'729 teaches a method of permanently dyeing hair comprising subjecting the hair to a treatment wherein the hair is contacted with a freshly made mixture of a) an oxidative dye intermediate in a shampoo base at an alkaline pH and b) an oxidative compound in a shampoo or a conditioner base at acidic pH (col. 11, L 20-62; col. 12, L 58 through col. 13, L 20 and example 1 in col. 14). '729 teach packing the above two

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parts separately in a kit and freshly mix before using or even mix on the scalp itself because the oxidizing part is unstable (col. 11, 33-35). '729 further teach incorporating the claimed surfactants (col. 9-10). '729 teach that the treatment time varies between 10 seconds to two minutes, thus suggesting that the oxidizing agent of part aii should be released within 10 seconds to 2 minutes. While '729 fails to teach the claimed conditioner cream, adjusting pH sodium carbonate (teaches sodium hydroxide –see example 1), '729 teaches the concept of applying a hydrogen peroxide containing conditioner base to the scalp after or along with a shampoo base, wherein the shampoo has alkaline pH. '729 does not teach the claimed limitation of maintaining the pH of the hair and scalp at an alkaline pH after applying the hydrogen peroxide composition and instead teaches that the part aii) is acidic.

'578 teaches an erasable hair dyeing process comprising contacting hair with a dye present in a shampoo base that imparts a second color to the hair that already has a color and subsequently contacting alkaline peroxide (3% hydrogen peroxide), wherein the visual appearance of the hair color imparted by the dye is restored (abstract, col. 3, L 34-col. 4, L 60, example 5 in col. 8). Thus, both '729 and '578 teach hair dyeing compositions for imparting the desired color strength to the hair by applying hydrogen peroxide after the hair dyeing step, wherein the hair dye is present in a shampoo base. While '729 teach that the shampoo has an alkaline pH, '578 teach that the hydrogen peroxide containing composition is in an alkaline pH. '578 further teach that hydrogen peroxide treatment imparts a visual appearance retaining the first color. Thus, in the

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absence of any unexpected advantage of maintaining the alkaline pH after peroxide treatment, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to adjust the pH of the peroxide containing composition to also to an acidic or an alkaline level and still achieve the desired hair color.

Alternatively, '578 do not teach maintaining alkaline pH of the shampoo containing the dye.

'990 teaches a hair shampoo or conditioner composition in the form of lotions, creams etc., wherein the composition has an alkaline pH of 8 to 10 (abstract, col. 2, L 37-68, col. 3, L 10-40). The composition of '990 comprises surfactants (col. 5-6), cationic polymers etc (examples). It would have been obvious for one of an ordinary skill in the art at the time of the instant invention to adjust the pH of the shampoo and hydrogen peroxide containing composition of '729 or '578 because '990 suggests that the alkaline pH (8 to 10) imparts body, fullness and texture to the fine hair in a very short time i.e., one minute or less (last lines of col. 2). Thus, one of an ordinary skill in the art would have expected to increase visual and tactile properties of hair i.e., thickness and texture by adjusting the pH of the composition to an alkalinity.

With respect to the new claim limitation, "simultaneously increasing the thickness of the diameter of the hair so treated by supplying oxygen directly to the scalp and hair", the above references teach the claimed method of treating hair, particularly to improve

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the appearance of the hair. With respect to the claimed increase in diameter between 9-15, as explained in the new rejection below, it is not clear what is meant by increasing the thickness of the diameter of hair and further it is unclear as to what the units of 9-15 are. However, in the absence of evidence to the contrary, it is implicit that the composition of '729 that has been adjusted to alkaline pH or the composition of '578 would increase the thickness of the hair upon application.

**In response to the amendment, the following is a new rejection:**

***Claim Rejections - 35 USC § 112***

2. Claims 6-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Instant claims require an increase in the thickness of the diameter of the hair, which is not supported by the instant application and further the dependent claim 7 states a range of 9-15, without actually stating what the numbers 9-15 stand for. A review of the instant specification (see paragraph 0010 reproduced from the specification below) reveals that the invention only states increase in the hair diameter but not the thickness of the diameter. Further, instant specification provides a support for increase in the percentage i.e., increase in diameter as 9.2% or 16.5%, but nowhere provides support for a range 9-15, particularly without the units associated with the numbers.

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[0010] The benefits of oxygen released in this inventive process, surprisingly have increased the diameter of hair so treated. After a first treatment with the test regimen, average hair diameter increased by 9.2%. With multiple treatments, the average hair diameter increased further, up to 16.4%. Moreover, hair so treated was evaluated by a curl retention method, wherein after one cycle, curl retention was increased by 90.4% and after five cycles 155.2% as compared to a conventional water treatment used as a control.

**Therefore, the above limitation lacks written description.**

3. Claim 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Instant claims are indefinite because it is unclear as what is the thickness of the diameter of hair, does it mean thickness or diameter? Further, it is unclear as to what range of numbers 9-15 stand for. A clarification is requested.

#### ***Claim Objections***

4. Claim 8 is objected to because of the following informalities: Line 2 of the instant claim has a blank space after the word "ionic", which appears to be an editorial error.

#### ***Response to Arguments***

Applicant's arguments filed 11-09-07 have been fully considered but they are not persuasive.

Applicants' argue that the patent examiner has cited patents 6726729, 5474578 and 601099, none of which disclose or suggest a method for increasing both the health and appearance of the hair and scalp and simultaneously increasing the thickness of



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the diameter of the hair so treated by supplying oxygen directly to the scalp and hair. It is argued that they do not disclose or suggest a method wherein the hair treated in steps [a], [b] and [c] to have an increase in the size of its diameter. It is argued that claim 6 is deemed to be allowable over these references and such allowance is respectively solicited, and Claims 7 and 8 are deemed to be allowable as being dependent on Claim 6 but Claim 7 is independently allowable since it defines the hair increase in diameter as falling within the range of 9-15. None of the references show such increase. Hence applicant respectfully requests that the final rejection be reversed and claims 6-8 be allowed.

Applicants' arguments are not found persuasive because as stated in the rejection above, the composition of the prior art contains the same components and is applied in the same method as claimed. Accordingly, the burden is shifted to applicants to show that prior art does not increase the diameter of the hair upon application. Other than the argument regarding the hair diameter, applicants did not argue about the composition of the cited prior art. However, examiner's response to applicant's arguments regarding the teaching of the above patents (Final rejection dated 6-6-07), have been incorporated as below:

It is argued that the two references US patents 6726729 and 5474578 use hydrogen peroxide for chemical reaction with dye stuffs (in hair dyeing) and is not the same as converting to oxygen without reacting with another compounds. It is argued that unlike the above patents, instant invention does not employ hydrogen peroxide to oxidize the dye. Applicants' arguments are not persuasive because instant claim recites

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that component c) is a conditioning cream and the phrase “containing” is interpreted as comprising, which allows for dye stuff of the prior art. Further, instant claims do not specifically exclude dyes or the oxidation of dyes in addition to supplying of oxygen. It is argued that US 6010990 uses high pH formulation and from the same product add a polymer to increase the diameter of the hair. *It is argued that instant claims require one or more surfactants in combination with pH, which is not the same as the prior art because the prior art does not perform the second step as claimed. However, while the instant second step only requires applying a shampoo with a pH between 8.0 and 11.0, instant claim does not exclude the presence of the polymer of the prior art. In fact, the prior art teaches increase in hair diameter as one of the advantages seen with present invention (described on page 2, lines 1-3 of instant disclosure).* On the other hand, the prior art references 5475578 and 6010990, both recognize the importance of alkaline pH (pH Of 8 to 10, within the claimed range) for imparting color (reads on instant appearance) and body as well as texture.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -5.30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on 571-272-8373. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lakshmi S Channavajjala/

Primary Examiner,

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